

IN THE TITLE:

Please amend the title to read as follows: --RECHARGEABLE BATTERY
HAVING A CURRENT COLLECTOR INTEGRALLY FORMED AND
CONTACTING A CURRENT COLLECTOR PLATE TO FORM A FLAT
PLANE--.

IN THE CLAIMS:

Please add the following claims.

--5. (Newly Added) A rechargeable battery comprising:

an electrode plate group including:

at least one first current collector;

a first electrode material adjacent the at least one first

current collector;

the at least one first current collector being integrally
formed and extending beyond the first electrode material and bending
at a 90° angle to form a flat plane at one end of the electrode plate
group;

at least one second current collector;

a second electrode material adjacent the at least one second current collector;

the at least one second current collector being integrally formed and extending beyond the second electrode material and bending at a 90° angle to form a flat plane at another end of the electrode plate group; and

an intervening separator for separating the at least one first current collector and the first electrode material from the at least one second current collector and the second electrode material;

an electrolyte;

a battery container for accommodating the electrode plate group and the electrolyte;

a first collector plate contacting the flat plane of the at least one first current collector; and

a second collector plate contacting the flat plane of the at least one second current collector.

6. (Newly Added) The rechargeable battery according to claim 5, wherein the at least one first current collector and the at least one second current collector are wound in spiral fashion with the intervening separator disposed therebetween and the

flat planes are formed by pressing the at least one first current collector and the at least one second current collector at opposite ends of the electrode plate group in directions along the winding axis of the electrode plate group.

7. (Newly Added) The rechargeable battery according to claim 6, wherein the the first current collector plate and the second current collector plate are laser-welded in the radial direction at a plurality of locations in the circumferential direction to respective flat planes.

8. (Newly Added) The rechargeable battery according to claim 6 or 7, wherein the first current collector plate and the second current collector plate each includes a plurality of ribs protruding toward respective flat planes of the at least one first current collector and the at least one second current collector and the first current collector plate and the second current collector plate are respectively welded to the at least one first current collector and the at least one second current collector at the plurality of ribs.

9. (Newly Added) The rechargeable battery according to claim 6 or 7, wherein a top edge of the at least one first current collector forms a continuous spiral edge bent orthogonally with respect to the axis of the spiral.

10. (Newly Added) A method of manufacturing a rechargeable battery comprising the following steps:

providing an electrode plate group including:

at least one first current collector;

a first electrode material adjacent the at least one first current collector;

the at least one first current collector being integrally formed and extending beyond the first electrode material and bending at a 90° angle to form a flat plane at one end of the electrode plate group;

at least one second current collector;

a second electrode material adjacent the at least one second current collector;

the at least one second current collector being integrally formed and extending beyond the second electrode material and bending at a 90° angle to form a flat plane at another end of the electrode plate group; and

an intervening separator for separating the at least one first current collector and the first electrode material from the at least one second current collector and the second electrode material;

an electrolyte;
providing a battery container for accommodating the electrode plate group
and the electrolyte;
providing a first collector plate contacting the flat plane of the at least one
first current collector; and
providing a second collector plate contacting the flat plane of the at least one
second current collector.

11. (Newly Added) The method of manufacturing a rechargeable battery according to claim 10, further comprising the step of winding the at least one first current collector and the at least one second current collector in spiral fashion with the intervening separator disposed therebetween and forming the flat planes by pressing the at least one first current collector and the at least one second current collector at opposite ends of the electrode plate group in directions along the winding axis of the electrode plate group.

12. (Newly Added) The method of manufacturing a rechargeable battery according to claim 11, further comprising laser-welding the first current collector plate and the second current collector plate in the radial direction at a plurality of locations in the circumferential direction to respective flat planes.

13. (Newly Added) The method of manufacturing a rechargeable battery according to claim 11 or 12, further comprising the step of providing the first current collector plate and the second current collector plate with a plurality of ribs protruding toward respective flat planes of the at least one first current collector and the at least one second current collector and respectively welding the first current collector plate and the second current collector plate to the at least one first current collector and the at least one second current collector at the plurality of ribs.

14. (Newly Added) The method of manufacturing a rechargeable battery according to claim 11 or 12, wherein a top edge of the at least one first current collector forms a continuous spiral edge bent orthogonally with respect to the axis of the spiral.--

IN THE ABSTRACT:

Please replace the abstract with the substitute abstract submitted on the following separate page. Appendix I is attached hereto having a marked version of said abstract with amendments indicated by brackets and underlining.